



Title: Sound Absorption Test Results

Product: 1-1/2" CFAB (3 lb. pcf)

Application: Wall Mount

Testing Standard: ASTM C423

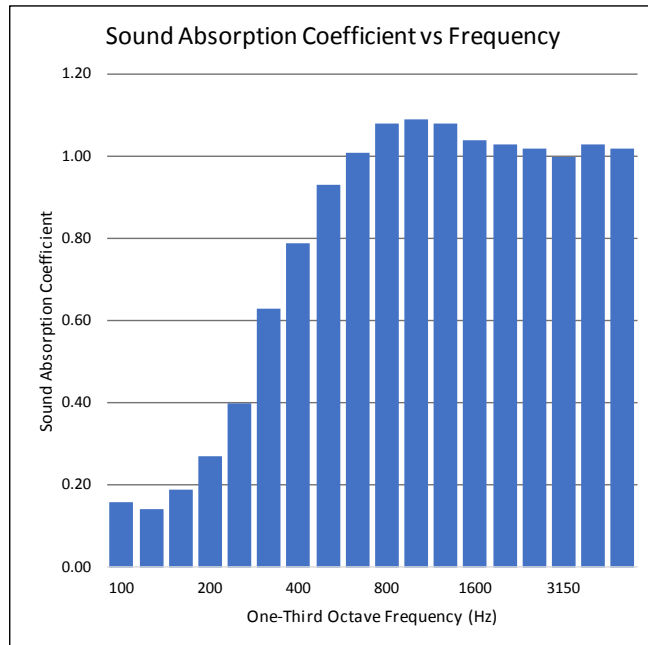
Test Date: 3/20/2008

Why this test: This test evaluates a products efficiency of absorbing sound at multiple frequencies. The test simulates the product installation on a wall or ceiling.

Test Result Summary: NRC - 0.85; SAA - 0.86

NRC	SAA
0.85	0.86

Frequency (Hz)	Absorption Coefficient
100	0.16
125	0.14
160	0.19
200	0.27
250	0.40
315	0.63
400	0.79
500	0.93
630	1.01
800	1.08
1000	1.09
1250	1.08
1600	1.04
2000	1.03
2500	1.02
3150	1.00
4000	1.03
5000	1.02



Test ID: A08-023

ASI TEST RESULT DISCLAIMER

ASI makes every effort to ensure the accuracy and reliability of the information provided. Laboratory testing is conducted by independent testing organizations. ASI does not guarantee that field tests or independent tests will not vary.



Riverbank Acoustical Laboratories (RAL)TM / An Alion Science Technical Center
 Sound Absorption and Sound Absorption Coefficients
 by the Reverberation Room Method ASTM C 423-07/NVLAP 08/P03

TEST NUMBER: A08-023

TEST DATE: FEBRUARY 18, 2008

CLIENT: Rendered by Manufacturer and Released to: Acoustical Surfaces, Inc.
 DESIGNATION: Specimen #4 1.5 in. Thick insulation
 DIMENSIONS: 96" x 108" x 1.5"
 AREA: 72.0 ft²
 WEIGHT: 30.5 lbs AREA WEIGHT: 0.42 lbs/ft²
 MOUNTING: A EDGE SEAL: Steel
 SPECIMEN DETAILS: 6@ 36" x 48" x 1.5"
 TEST ROOM DETAILS: Room 0 Volume = 10311 ft³ Area = 2864.3 ft²
 FILE NAME: A08_023_080218_A.doc

RIVERBANK ACOUSTICAL LABORATORIES

1/3 OCTAVE CENTER FREQ. (Hz)	ABSORPTION COEFFICIENT	TOTAL ABSORPTION (SABINS)
100	0.16	11.85
125	0.14	9.97
160	0.19	13.93
200	0.27	19.37
250	0.40	28.77
315	0.63	45.41
400	0.79	56.82
500	0.93	66.67
630	1.01	73.07
800	1.08	77.88
1000	1.09	78.54
1250	1.08	77.96
1600	1.04	75.19
2000	1.03	74.12
2500	1.02	73.23
3150	1.00	72.34
4000	1.03	74.34
5000	1.02	73.47

SOUND ABSORPTION AVERAGE [SAA] = 0.86
NOISE REDUCTION COEFFICIENT [NRC] = 0.85

Test Conducted by: Dean Victor

This single report page and accompanying graph contain the instantaneous raw data as provided to the client after testing of the specimen. This data, although accurate, is incomplete without the full specimen description, mounting details and signature pages. The full report referenced by the RAL test number above should be consulted for further information regarding these results.



ACOUSTICAL

SURFACES INC.

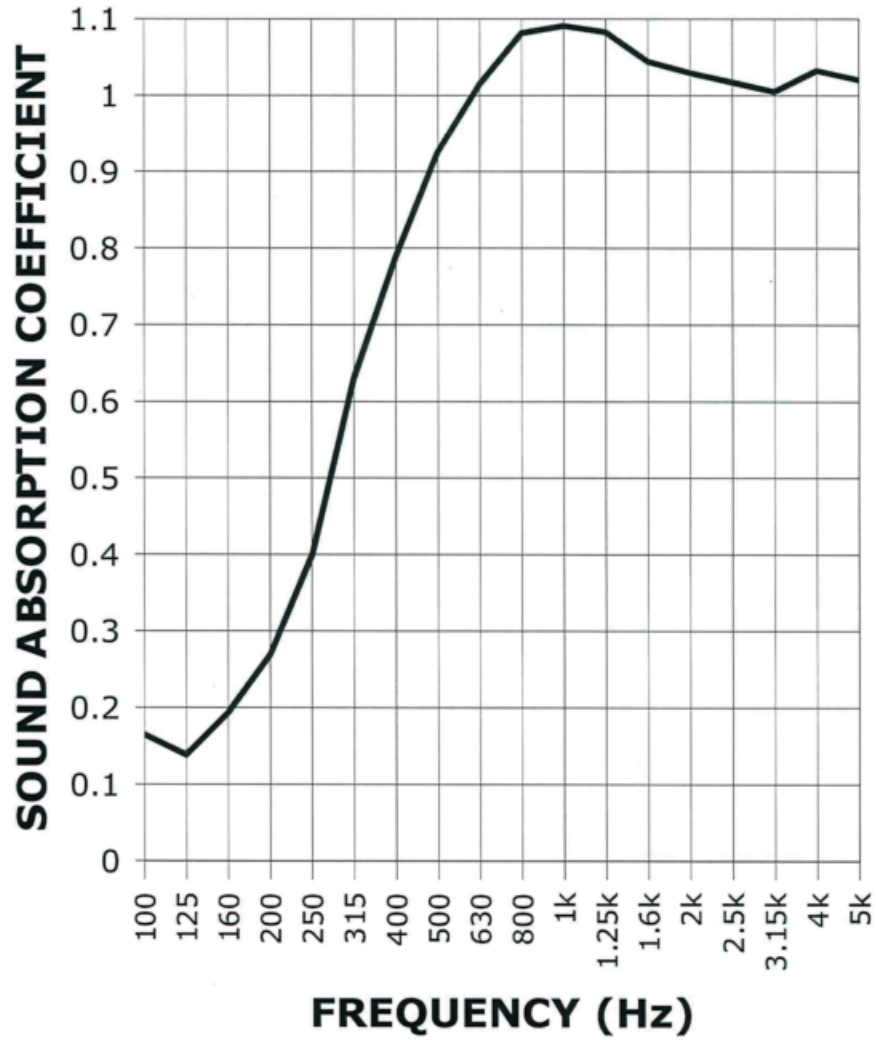
Sound Solutions for Over 35 Years

Soundproofing | Acoustics | Noise & Vibration Control

TM

**SOUND ABSORPTION REPORT
RAL - A08-023**

RIVERBANK ACOUSTICAL LABORATORIES



**SAA = 0.86
NRC = 0.85**



Riverbank Acoustical Laboratories (RAL)TM / An Alion Science Technical Center

TEST NUMBER: A08-023 TEST DATE: FEBRUARY 18, 2008
 CLIENT: Rendered by Manufacturer and Released to: Acoustical Surfaces, Inc.
 DESIGNATION: Specimen #4 1.5 in. Thick insulation

TEST ROOM DETAILS: Room 0 Volume = 10311 ft³ Area = 2864.3 ft²

SPECIMEN DATA

1/3 OCTAVE CENTER FREQ. (Hz)	DECAY TIME FOR 60 dB IN SECONDS (Rt)	DECAY RATE (dB/s)	ABSORPTION (SABINS) (w/ANSI Temp./Humid Corrections)	% UNCERTAINTY WITH 95% CONF. LIMITS FOR ABSORP. OF REV. RM.
100	4.569	13.133	109.82	3.70
125	5.077	11.817	98.37	3.20
160	5.168	11.609	96.00	2.93
200	5.212	11.513	94.40	2.33
250	4.751	12.628	102.73	2.59
315	4.130	14.527	117.34	2.13
400	3.810	15.747	125.93	1.84
500	3.440	17.441	138.46	1.71
630	3.300	18.179	142.80	1.34
800	3.122	19.218	149.48	1.21
1000	2.996	20.027	154.09	1.12
1250	2.779	21.591	164.51	1.04
1600	2.682	22.371	166.79	0.94
2000	2.503	23.976	174.51	0.98
2500	2.329	25.757	180.72	0.74
3150	2.216	27.080	177.71	0.72
4000	1.999	30.010	179.19	0.72
5000	1.756	34.163	180.09	0.66

INPUTS:

PULSE PROGRAM TEMPLATE: Reverb_Rm0_Pre.plt		AVERAGING METHOD: Exponential	
FREQUENCY RANGE: 100 Hz to 5000 Hz		AVERAGING TIME: 1/32 s	
		OUTPUT INTERVAL: 34 ms	
Environmental Conditions:			
START:	70°F	60% RH	NUM OF SPECTRA: 200
COMPLETION:	70°F	57% RH	APPROXIMATE DECAY TIME: 6.8 sec
NOTE: ANSI TEMP/HUMID CORRECTIONS USED		NUM OF MEASUREMENTS: 80	
MINIMUM # OF POINTS: 23 at 5000 Hz		NUM OF GROUPS: 1	
FILE NAME: A08_023_080218_A.doc		DELAY PROCESSING: Delay	

RIVERBANK ACOUSTICAL LABORATORIES

Test Conducted by: Dean Victor